```
To:
          "'David_Hayes@ios.doi.gov"" [David_Hayes@ios.doi.gov]; 'JReich@doc.gov'"
       [JReich@doc.gov]; Boots, Michael J." Ex. 6 - Personal Privacy
'Monica.medina@noaa.gov'" [Monica.medina@noaa.gov]; 'Robert.Bonnie@osec.usda.gov'"
[Robert.Bonnie@osec.usda.gov]; ancy Stoner/DC/USEPA/US@EPA;"ann.mills@osec.usda.gov"
[ann.mills@osec.usda.gov]; 'ann.mills@osec.usda.gov'" [ann.mills@osec.usda.gov];
'joellen.darcy@us.army.mil'" [joellen.darcy@us.army.mil]; 'rock.salt@us.army.mil'"
Ex. 6 - Personal Privacy Joan.R.Langhans@noaa.gov'''
       [Joan.R.Langhans@noaa.gov]; Siegel, Matthew J."
                                        : Mertens. Richard A."
        Ex. 6 - Personal Privacy VI; Nuzum, R. Scott"
                                        Ericsson, Sally C."
                                       'Steven.L.Stockton@usace.army.mil'"
       [Steven.L.Stockton@usace.armv.mil]; 'ada.benavides@usace.armv.mil"
       [ada.benavides@usace.army.mil]; 'andrew.hagelin@conus.army.mil"
       [andrew.hagelin@conus.army.mil]; 'arnab.raychaudhuri@us.army.mil"
       [arnab.raychaudhuri@us.army.mil]; 'barbara_diehl@ios.doi.gov'"
       [barbara_diehl@ios.doi.gov]; 'chip.smith1@us.army.mil'"
       [chip.smith1@us.army.mil]; 'david_nawi@ios.doi.gov'"
                                                           [david_nawi@ios.doi.gov];
'dmurillo@usbr.gov'" [dmurillo@usbr.gov]; Feller, Erika" [Erika M. Feller@ceg.eop.gov];
'eileen sobeck@ios.doi.gov'" [eileen_sobeck@ios.doi.gov]; oger
Gorke/DC/USEPA/US@EPA;"'kat pustay@ios.doi.gov'"
                                                           [kat pustay@ios.doi.gov];
'kat_pustay@ios.doi.gov'"
                             [kat_pustay@ios.doi.gov]; 'kfinkler@usbr.gov"
[kfinkler@usbr.gov]; atthew Klasen/DC/USEPA/US@EPA;"ksarri@doc.gov"
       [ksarri@doc.gov]; 'ksarri@doc.gov'"
                                            [ksarri@doc.gov]; 'letty_belin@ios.doi.gov'"
[letty_belin@ios.doi.gov]; 'lori_caramanian@ios.doi.gov'" [lori_caramanian@ios.doi.gov];
'margaret.spring@noaa.gov" [margaret.spring@noaa.gov]; Boots, Michael J."
            Ex. 6 - Personal Privacy
                                     'mlconnor@usbr.gov'" [mlconnor@usbr.gov];
'rod.mcinnis@noaa.gov'" [rod.mcinnis@noaa.gov]; 'ryan.wulff@noaa.gov'"
       [ryan.wulff@noaa.gov]; aren
Schwinn/R9/USEPA/US@EPA;"'tanya.dobrzynski@noaa.gov'" [tanya.dobrzynski@noaa.gov];
'tanya.dobrzynski@noaa.gov'" [tanya.dobrzynski@noaa.gov]; 'will.stelle@noaa.gov'"
[will.stelle@noaa.gov]; om Hagler/R9/USEPA/US@EPA;"'Paul.J.Robershotte@usace.army.mil"
[Paul.J.Robershotte@usace.army.mil]; 'Paul.J.Robershotte@usace.army.mil"
[Paul.J.Robershotte@usace.army.mil]; 'Ren_Lohoefener@fws.gov'" [Ren_Lohoefener@fws.gov];
'Rod.Mcinnis@noaa.gov'"
                             [Rod.Mcinnis@noaa.gov]; 'Tanis.J.Toland@usace.army.mil'"
       [Tanis.J.Toland@usace.army.mil]; 'William.J.Leady@usace.army.mil"
       [William.J.Leady@usace.army.mil]; ared
Blumenfeld/R9/USEPA/US@EPA;"cindy.l.tejeda@usace.army.mil"
       [cindy.l.tejeda@usace.army.mil]; 'cindy.l.tejeda@usace.army.mil"
       [cindy.l.tejeda@usace.army.mil]; 'dan castleberry@fws.gov'"
       [dan_castleberry@fws.gov]; 'dglaser@usbr.gov'" [dglaser@usbr.gov];
'ed.burton@ca.usda.gov'" [ed.burton@ca.usda.gov]; 'gayle.norman@ca.usda.gov'"
[gayle.norman@ca.usda.gov]; 'luana.kiger@ca.usda.gov'" [luana.kiger@ca.usda.gov];
'maria.rea@noaa.gov" [maria.rea@noaa.gov]; 'parroyave@usbr.gov'" [parroyave@usbr.gov];
'will.stelle@noaa.gov'" [will.stelle@noaa.gov]
From:
          "Feller, Erika"
          Thur 5/5/2011 5:39:05 PM
Sent:
Subject: Fw: REPORT RELEASE ANNOUNCEMENT: NAS Scientific Review of BDCP
Fyi - NAS release.
---- Original Message -----
From: Belin, Letty <Letty_Belin@ios.doi.gov>
To: Feller, Erika
```

Sent: Thu May 05 13:12:34 2011

Subject: FW: REPORT RELEASE ANNOUNCEMENT: NAS Scientific Review of BDCP

----Original Message-----

From: Ellen de Guzman [mailto:edguzman@NAS.EDU]

Sent: Thursday, May 05, 2011 12:59 PM To: CA\_BAY\_DELTA@LSW.NAS.EDU

Subject: REPORT RELEASE ANNOUNCEMENT: NAS Scientific Review of BDCP

## FOR IMMEDIATE RELEASE:

CALIFORNIA'S DRAFT BAY DELTA CONSERVATION PLAN INCOMPLETE; NEEDS BETTER INTEGRATION TO BE MORE SCIENTIFICALLY CREDIBLE

WASHINGTON - A draft plan to conserve habitat for endangered and threatened fishes in the California Bay-Delta while continuing to divert water for agricultural and personal use in central and southern California has critical missing components, including clearly defined goals and a scientific analysis of the proposed project's potential impacts on delta species, says a new report from the National Research Council. In addition, the scientific information in the plan is fragmented and presented in an unconnected manner, making its meaning difficult to understand.

The delta region receives fresh water from the Sacramento and San Joaquin rivers and their tributaries, and water from the delta ultimately flows into the San Francisco Bay and the Pacific Ocean. Pumping stations divert water from the delta, primarily to supply Central Valley agriculture and southern California metropolitan areas. The effects of an increasing population and the operation of the engineered water-control system have substantially altered the delta ecosystem, including its fish species.

The November 2010 draft of the Bay Delta Conservation Plan (BDCP) aims to gain authorization under the federal Endangered Species Act and companion California legislation for a proposed water diversion project, such as a canal or tunnel that would take water from the northern part of the delta directly to the south while protecting the region's ecosystems. To date approximately \$150 million has been spent in developing the BDCP, which is being prepared by a steering committee of federal, state, and local agencies, environmental organizations, and other interest groups. The plan is slated for completion by 2013 and would be implemented over the next 50 years.

The draft BDCP states that the principal component of a habitat conservation plan is an "effects analysis," which the plan defines as "a systematic, scientific look at the potential impacts of a proposed project on those species and how those species would benefit from conservation actions." However, the effects analysis is still being prepared and was not included in the BDCP, resulting in a critical gap in the science. Without this analysis, it is hard to evaluate alternative mitigation and conservation actions.

The BDCP lacks clarity in its purpose, which makes it difficult to properly understand, interpret, and review the science that underlies the plan, stated

the panel that wrote the report. Specifically, it is unclear whether the BDCP is exclusively a habitat conservation plan to be used as an application to "take" - meaning to injure, harass, or kill -- listed species incidentally or whether it is intended to be a plan that achieves the co-equal goals of providing reliable water supply and protecting and enhancing the delta ecosystem. If it is the latter, a more logical sequence would be to select alternative projects or operation regimes only after the effects analysis is completed.

Furthermore, the draft BDCP combines a catalog of overwhelming detail with qualitative analyses of many separate actions that often appear disconnected and poorly integrated, the panel said. There are many scientific elements, but the science is not drawn together in an integrated fashion to support the restoration activities. The panel noted that a systematic and comprehensive restoration plan needs a clearly stated strategic view of what each scientific component is intended to accomplish and how this will be done.

"There is a strong body of solid science to support some of the actions discussed in the BDCP, but because the science is not well-integrated, we are getting less from the science than we could," said panel chair Henry Vaux, professor emeritus of resource economics at the University of California in Berkeley and Riverside. "As our report concludes, a stronger and more complete BDCP -- and the panel identified several areas for improvement -- could contribute importantly to solving the problems that beset the delta."

The study was sponsored by the U.S. departments of the Interior and Commerce. The National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council make up the National Academies. They are independent, nonprofit institutions that provide science, technology, and health policy advice under an 1863 congressional charter. Panel members, who serve pro bono as volunteers, are chosen by the Academies for each study based on their expertise and experience and must satisfy the Academies' conflict-of-interest standards. The resulting consensus reports undergo external peer review before completion. For more information, visit http://national-academies.org/studycommitteprocess.pdf. A panel roster follows.

## Contacts:

Jennifer Walsh, Media Relations Officer
Shaquanna Shields, Media Relations Assistant Office of News and Public
Information 202-334-2138; e-mail news@nas.edu<mailto:news@nas.edu>

Pre-publication copies of A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan are available from the National Academies Press; tel. 202-334-3313 or 1-800-624-6242 or on the Internet at http://www.nap.edu. Reporters may obtain a copy from the Office of News and Public Information (contacts listed above).

# # #

NATIONAL RESEARCH COUNCIL Division on Earth and Life Studies

Water Science and Technology Board Ocean Studies Board

Panel to Review California's Draft Bay-Delta Conservation Plan

Henry J. Vaux Jr. (chair) Professor Emeritus of Resource Economics, and Associate Vice President Emeritus University of California Berkeley

Michael E. Campana Professor Department of Geosciences Oregon State University Corvallis

Jerome B. Gilbert\*
Consulting Engineer, and
Founder
J. Gilbert Inc.
Orinda, Calif.

Albert E. Giorgi President and Senior Fisheries Scientist BioAnalysts Inc. Redmond, Wash.

Robert J. Huggett
Independent Consultant, and
Professor Emeritus
Department of Environmental Sciences
Virginia Institute of Marine Science
College of William and Mary
Williamsburg, Va.

Christine A. Klein Chesterfield Smith Professor of Law Levin College of Law University of Florida Gainesville

Samuel N. Luoma
Senior Research Hydrologist
Waters Resources Division
U..S. Geological Survey
Menlo Park, Calif.
Department of Environmental Sciences

Thomas Miller Professor Chesapeake Biological Laboratory Center for Environmental Science University of Maryland Solomons Stephens G. Monismith
Obayashi Professor and Chair
Department of Civil Engineering, and
Director

Environmental Fluid Mechanics Laboratory Stanford University Stanford, Calif.

Jayantha Obeysekera
Director
Hydrologic and Environmental
Systems Modeling
South Florida Water Management District
West Palm Beach

Hans W. Paerl Kenan Professor of Marine and Environmental Sciences Institute of Marine Sciences University of North Carolina Morehead City

Max J. Pfeffer Professor Department of Development Sociology Cornell University Ithaca, N.Y.

Desiree D. Tullos Assistant Professor Department of Biological and Ecological Engineering Oregon State University Corvallis

**STAFF** 

Laura Helsabeck Study Director

<sup>\*</sup> Member, National Academy of Engineering